

REMARKS

Claims 1-43 remain pending in the instant application (hereinafter, the "'237 Application") and stand rejected. Claims 1, 2, 15, 19, 21, 29, 36 and 42 are amended herewith, without new matter. Exemplary support for the amendments to these claims is found in the claim-by-claim response, below.

It is believed that the above amendments and the following remarks attend to and serve to overcome all issues raised in the Office Action dated 04 December, 2006.

Summary of Goff vs. '237 Application

Before discussing the Examiner's rejections, a brief comparison of the '237 Application and Goff may be helpful. The '237 Application and claims recite methods and apparatus (e.g., an optical sensor) for ameliorating problems caused by non-active gaps between sensor elements. By reducing the non-active gap between sensor elements, the time delay between sensor elements in receiving image information (e.g., red, green and blue image components of a moving subject) is also reduced. Fidelity of the final image is improved "because the combined image components present a closer match to the true image at an instantaneous moment or "snapshot" of interest. In other words, optical congruence may be enhanced by the use of the invention." Specification p. 3, lines 20-23.

Goff, on the other hand, is classified by the USPTO under "Gas Separation," and discloses a Real-Time Alkali Monitoring System for monitoring emission components of potassium and sodium from a combustion flame. In particular, Goff combusts a sample to produce flame emissions, which are transmitted to filters that separate the emissions. One pair of filters determines the concentration of one alkali species (e.g., potassium), and another pair of filters determines alkali concentration of a second alkali species (e.g., sodium). Each filter of a filter pair transmits emission signals to a detector, which in turn signals an amplifier. For each emission, scaled signals from one amplifier are compared with signals from another amplifier, "to produce a signal having an amplitude that is proportional to concentration of the alkali species being monitored by that channel of the

apparatus." Goff col. 7, lines 58-61; see also Goff col. 4, line 32- col. 7, line 61; FIGs. 1-4.

Goff is not concerned with reducing a non-active gap (and especially not with enhancing linear arrays of sensor segments), notably because Goff *separates* components from an incoming light source, to determine the concentration of each component within a combusted material. For at least this reason, Goff also is not concerned with enhancing optical congruence. See Goff FIGs. 3 and 4. The aim of Goff is to separate a source (e.g., a flame) into component parts (e.g., species), which are not to be joined in any final image. Optical congruence is simply not important in Goff – indeed, optical congruence runs counter to Goff's aim of separating flame emissions of alkali species from a sample flame. Goff, for example, makes no mention of coherent fiber optics such as fiber optic faceplates or tapers mounted to a display monitor. Such fiber optics are well known in the art to distinguish point-to-point imaging preservation, as in the '237 Application.

Claim Rejections – 35 U.S.C. § 103 - Goff

On page 2 of the pending Office Action, the Examiner states that claims 1-3, 5, 7-12, 14-17, 19-24 and 36-41 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,896,965 (hereinafter, "Goff"). However, the Examiner then presents rejections for the aforementioned claims and also claims 25-28, 34 and 35. Claims 25-35 are therefore also addressed in this section.

Respectfully, we disagree with and traverse the Examiner's rejection, since Goff does not render the claims *prima facie* obvious. The following is a quotation from the MPEP setting forth the three basic criteria that must be met to establish a *prima facie* case of obviousness:

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined)

must teach or suggest all the claim limitations.” MPEP, §2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

It is fundamental to 35 U.S.C. §103 that each and every limitation of the claim elements must be taught or suggested; however, Goff fails to teach or suggest all the limitations of claims 1-3, 5, 7-12, 14-17, 19-28 and 36-41.

Claim 1: Turning now to the specific rejections, claim 1 stands rejected as being unpatentable over Goff. The Examiner recognizes that Goff does not disclose enhancing optical congruence of linear arrays in relation to each other. However, the Examiner contends that it would have been obvious to modify or adjust Goff’s monitoring system “to improve the uniform conversion of the transmitted light into electrical signals corresponding to the detectors in order to provide a clear and precise image of the object which is indicative of optical congruence between the detectors.” Office Action, p. 3.

We respectfully disagree. Goff does not image an object at all, nor does Goff teach or suggest that imaging an object is desirable. Indeed, Goff does not include or even suggest components that would be necessary for imaging an object. Rather, Goff is concerned with separating and analyzing light components. This is not imaging, and it is likewise markedly different from enhancing optical congruence (e.g., for joining separated RGB components of a sensor to an incoming source, as in the ‘237 Application). As noted above, the idea of optical congruence does not complement Goff’s aim of separating and analyzing alkali species. Goff therefore does not teach or suggest every element of claim 1, and furthermore, there is no motivation to modify Goff to include object imaging or enhancing optical congruence.

Respectfully, the Examiner appears to assume limitations in Goff that Goff not only fails to suggest, but that also run counter to Goff’s intended purpose. Goff’s system is fundamentally different from what is claimed in the ‘237 Application. One indication of this difference is seen in Goff’s use of an Opal Diffuser at the common end of a fiber array, in all preferred embodiments. This diffuser would, in essence, destroy the point-to-point pictorial imaging properties that the inventions of the ‘237 Application can preserve. Hence, the diffuser is used not to preserve image fidelity but to homogenize

light, or "...to improve the illumination uniformity, thus, stabilizing the splitting ratio among the fiber optic branches." Goff col. 4, lines 29-31.

Although claim 1 is believed patentable over Goff "as is," in order to emphasize unique claim features, claim 1 is amended herewith to recite directing first and second image information from a field of view to first and second linear arrays of sensor segments...thereby providing optical congruence between the field of view and the first and second image information without substantial time delay. This amendment is supported throughout the '237 Application. For example:

"The apparatus effectively reduces a non-active gap of an optical sensor or sensors. The apparatus gathers light information at or near a field of view and directs the image information to at least two linear sensor elements of an optical sensor so as to improve the image fidelity of the subject by enhancing the optical congruence capability of the optical sensor at an instantaneous or "photographic" time of interest." Specification p. 6, lines 6-10

"The invention addresses the difficulties of the prior art by the use of optical fibers oriented to obtain visual images from a field of view and distribute components of the optical images to more widely-spaced sensor elements of one or more optical sensors. This can enhance the optical congruence of the image obtained through the more widely-spaced sensor elements and eliminate inaccuracies caused by non-active optical gaps in the sensors. The image fidelity of a subject can be improved at an instantaneous or "photographic" time of interest by reducing the potential image degrading effects between the sensor elements. Such image degrading effects can include a differential time delay, angular and/or positional differences between the sensor elements. Specifically, optical congruence is enhanced in that the image information received by each sensor element at any instantaneous time is a closer representation of the original subject field than it would be if the sensor elements received image information directly from the field of view without non-active gap mitigation. Thus, the invention compensates for the image degrading effects, more severe in dynamically moving objects, that arise from the ordinarily non-active gap between sensor elements." Specification p. 7, lines 6-21. Further support may be found at Specification p. 3, lines 4-23, among other locations.

Goff is silent as to image information or providing optical congruence without

substantial time delay. This makes logical sense, since Goff is not concerned with imaging, as in the '237 Application, but rather recites a subtractive process, the aim of which is to break a sample flame into component parts and produce a signal related to a component part:

"The flame emissions are then transmitted to a pair of bandpass filters having passbands centered about the spectral-emission line of *an alkali species*...the signals transmitted by each of the bandpass filters are then detected and one of the detected signals is scaled. Finally, the difference between the scaled signal and the other detected signal is calculated *to produce an output signal having an amplitude proportional to the intensity of the emission line being monitored.*" Goff col. 3, lines 29-42.

Time delay between emission lines would arguably aid Goff in analyzing flame components. It also stands to reason that since Goff seeks to essentially pull apart the signatures of a subject flame, optical congruence would not only be unnecessary, but also undesirable. Providing optical congruence (e.g., producing an improved fidelity image) of the subject flame runs counter to Goff's goal of breaking the flame down into separate signatures, to produce a signal related to a monitored component of the flame. Accordingly, Goff is silent as to imaging; indeed, as noted, Goff does not teach, depict or even suggest imaging. Goff is also silent as to optical congruence. We further submit that Goff's generally destructive process teaches against the constructive optical sensor apparatus of claim 1. Therefore, there is no motivation to modify Goff as the Examiner suggests.

For at least the above reasons, we respectfully request withdrawal of the Examiner's rejection, and allowance of claim 1.

Dependent Claims 2, 3, 5, 7-12 and 14: These claims depend from claim 1. We have shown that Goff can not and does not establish a case of *prima facie* obviousness over claim 1. And courts have ruled that if an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071.5 USPQ2d 1596 (Fed. Cir. 1988). Claims 2, 3, 5, 7-12 and 14 are therefore allowable over Goff at least because they depend from claim 1. However, there are

additional features of these claims that are not taught or suggested by Goff, including the following:

- Goff does not teach or suggest the elements of **amended claim 2 or claims 3, 5, 7-12 or 14**, in the context of claim 1.
- Contrary to the Examiner's statement, Goff does not teach first ends of first and second optical fibers arranged in a single column, as in **claim 5**. The Examiner states that Goff teaches such a single column "corresponding to the common end (24)," however, Goff clearly recites that "Common end 24 has fibers randomly organized". Goff col. 4, line 38. There is no teaching of columnar arrangement at first ends of optical fibers, within Goff.
- Furthermore, **claims 8-10** respectively recite a linear sensor, a tri-linear sensor and a matrix sensor. The Examiner states that Goff's sensor is considered linear since "no structural foundation is provided to indicate the optical sensor is actually a "linear sensor", this limitation is considered intended use and is afforded no patentable weight." Office Action, p. 4. We respectfully disagree, at least since claim 1 recites an optical sensor apparatus "comprising: an optical sensor." The optical sensor is an element of the claim, and claims 8-10 specify particular types of optical sensors. How, then, can these particular sensor types not be 'actually indicated'? We further direct the Examiner's attention to p. 13, line 21 -p. 14, line 2 of the specification, which discusses these sensor types in the context of Applicant's sensor apparatus. Reconsideration is respectfully requested.
- In addition, we respectfully request evidence, pursuant MPEP §2144, that modifying Goff as the Examiner suggests in rejecting **claims 11 and 12**, would have been obvious to one of skill in the art at the time the invention was made. However, regardless of any evidence the Examiner may find, we note again that Goff does not recite or suggest any sensor that can image an object or direct image information.

Given the above remarks, we submit that *prima facie* obviousness is not established, and we respectfully request withdrawal of the Examiner's rejections, and allowance of claims 2, 3, 5, 7-12 and 14.

Claim 15: Like claim 1, independent claim 15 recites reducing a non-active gap, which, as noted above, is not recited or suggested in Goff. In addition, claim 15 is amended to recite first-through-third optical fibers that direct image information from a field of view to sensor segments of first-through-third linear arrays, thereby providing optical congruence between the field of view and the image information without substantial delay. As noted above, Goff simply does not teach or suggest these elements. We respectfully direct the Examiner's attention to the arguments in support of claim 1, which likewise evidence nonobviousness of claim 15. Withdrawal of the Examiner's rejection, and allowance of claim 15, are respectfully requested.

Dependent Claims 16 and 17: These claims depend from claim 15, and benefit from like argument. Furthermore, Goff does not disclose the elements of claims 16 and 17, in the context of claim 15. For example, Goff does not recite first ends of first, second and third fibers arranged in a single column, as in claim 17. Rather, Goff specifies that common end 24, which the Examiner identifies as the so-called columnar end, are "randomly organized." Goff col. 4, line 38. This is different from a single column.

Given at least the above reasons, we respectfully request withdrawal of the Examiner's §103 rejection, and allowance of claims 16 and 17.

Claim 19: Independent claim 19 likewise recites reducing a non-active gap of an optical sensor, which clearly does not concern Goff. Further, the Examiner admits that Goff does not teach fiber optic faceplates. Coherent fiber optics such as fiber optic faceplates are characteristic of point-to-point image preservation; however, Goff does not deal with image preservation, instead seeking to split emission signatures from a combustion flame. We therefore disagree that such faceplates would be obvious for Goff's applications. Of further note, Goff nowhere mentions or depicts optical fibers with

field-of-view-oriented ends that are separated by a distance that is less than a non-active gap of the optical sensor.

Despite these differences, in order to more clearly point out differences between Goff and the '237 Application, claim 19 is amended in the manner of claims 1 and 15, to recite directing image information and providing optical congruence between a field of view and the image information, without substantial time delay. As noted above, such features are fully supported by the '237 Application and are nowhere taught or suggested by Goff. See arguments in support of claim 1, above. *Prima facie* obviousness is therefore not established, and we respectfully request withdrawal of the Examiner's rejection, and allowance of claim 19.

Dependent Claims 20-28, 34 and 35: These claims depend from claim 19, shown to be nonobvious in light of Goff. Again, if an independent claim is nonobvious under U.S.C. § 103, then any claim depending therefrom is nonobvious. In re Fine, quoted above. Hence, claims 20-28, 34 and 35 are considered allowable over Goff for at least this reason. Additional unique features of these claims include, but are not limited to, the following:

- Goff does not teach or suggest the elements of **claims 20-28**, in the context of claim 19.
- Goff does not recite fiber optic faceplates, as in **claim 21**. In addition, claim 21 is amended to recite third image information directed from a field of view to a third linear array. Goff is simply silent as to this feature.
- Goff does not teach first ends of first and second optical fibers arranged in a single column, as in **claim 22**. Instead, Goff recites random organizations of fiber ends. See arguments in support of claims 5 and 17, above.
- Goff does not teach or suggest optical fibers mounted normal to a plane formed by a first fiber optic faceplate, as in **claim 23**. Indeed, as the Examiner notes, Goff does not recite or depict faceplates at all.

- Finally, Goff does not teach or suggest an optical sensor mounted to a second fiber optic faceplate, as in **claim 24**. The Examiner makes a broad statement that faceplates on optical fibers are known; however, the Examiner does not address faceplates mounted to optical sensors. Neither does Goff.
- Finally, Goff does not teach or suggest a tri-linear CCD image sensor, as in **claim 25**, or a matrix sensor or at least one linear array formed on a matrix sensor, as in **claims 26, 27, 34 and 35**. We respectfully disagree that "Goff discloses the optical sensor is a linear sensor since no structural foundation is provided to indicate the optical sensor is actually a 'linear sensor'". Office Action p. 6. These sensors are clearly recited in the claims, and applicants base claim requires an optical sensor as part of the optical sensor apparatus. See also arguments in support of claims 8-10, above.

For at least the above reasons, *prima facie* obviousness is not established over claims 20-28, 34 and 35; we respectfully request withdrawal of the Examiner's rejections, and allowance of the aforementioned claims.

Claim 36: Independent claim 36 recites a method of effectively reducing a non-active gap of an optical sensor, which, again, Goff does not teach or suggest. Goff is not concerned with reducing a non-active gap, and indeed makes no mention of such gap. This stands to reason, since Goff does not seek to create any final image, but rather separates a flame into signature emissions. Therefore, the Examiner's stated motivation for modifying Goff ("to provide a clear and precise image of the object which is indicative of optical congruence between the detectors" Office Action p. 8) fails. Goff does not image an object, nor does Goff anywhere suggest that imaging is desirable in connection with his alkali monitoring system. Again, Goff's desired end products are alkali emissions separated from a combustion flame. Goff is not concerned with imaging the combustion flame as a whole. See arguments in support of claim 1, above.

Claim 36 also recites that optical congruence of said first linear sensor, said second linear sensor and said third linear sensor are enhanced in relation to each other. Again, this is nowhere taught or suggested in Goff.

Although claim 36 is believed patentable "as is", like claims 1, 15 and 19, claim 36 is amended to recite that first, second and third optical fibers direct image information from a field of view to sensor elements, thereby providing optical congruence between said field of view and said image information, without substantial time delay. Goff clearly does not teach, depict or even suggest such features. Goff therefore cannot and does not render claim 36 *prima facie* obvious. Accordingly, we respectfully request withdrawal of the Examiner's rejection, and allowance of claim 36.

Dependent Claims 37-41: These claims depend from claim 36, and benefit from like argument. Claims 37-41 also recite unique limitations that include, but are not limited to:

- A tri-linear CCD image sensor, as in **claim 38**;
- A matrix sensor, as in **claim 39**, or
- a linear array formed on a matrix sensor, as in **claim 40**.

Goff does not teach or suggest any of these. See arguments in support of claims 8-10, above. We respectfully request withdrawal of the Examiner's rejection, and allowance of claims 37-41.

Claim Rejections – 35 U.S.C. § 103 – Goff and Fisher

Claims 29-32 stand rejected as being unpatentable over Goff in view of U.S. Patent No. 4,189, 207 ("Fisher"). We again respectfully disagree and traverse the rejection.

Claim 29: Independent claim 29 recites an apparatus for effectively reducing a non-active gap of an optical sensor, including a first spacer mounted between second ends of first and second optical fibers, to locate the second ends further apart than first ends of the first and second optical fibers, and to correspond to elements of an optical sensor. The Examiner notes that Goff does not disclose a spacer, and relies on Fisher for this missing element. However, even if Fisher is added, the combined patents do not

yield an apparatus for reducing a non-active gap of an optical sensor. Neither patent is concerned with a non-active gap.

Claim 29 is also amended to recite a spacer that locates second ends of first and second optical fibers "to provide optical congruence between said field of view and image information directed from said field of view to said elements via said first and second optical fibers, without substantial time delay." This is not a teaching, suggestion or even a concern of Goff or Fisher. We therefore respectfully request withdrawal of the rejection, and allowance of claim 29.

Dependent Claims 30-32: These claims depend from claim 29, and benefit from like argument. Furthermore:

Claim 30 recites a tri-linear optical sensor which, as noted above, is not taught or suggested in Goff. Fisher is also silent as to a sensor, instead reciting an optical lens.

Claim 31 recites first ends of first, second and third optical fibers arranged in a single column. The Examiner again asserts that Goff figure 1, optical fibers 26 shows this limitation. However, we must point out that "first ends" are defined in claim 29 as being oriented towards a field of view. The ends that are oriented toward the combustion flame in Goff are not columnar, but are "randomly organized". Goff col. 4, line 38. This is a clearly different arrangement than that recited in claim 31; therefore, *prima facie* obviousness is not established.

Given at least the above remarks, we respectfully request withdrawal of the Examiner's rejection, and allowance of claims 30-32.

Claim Rejections – 35 U.S.C. § 103 – Goff and Frankel

Claims 4, 6, 13, 18 and 41 stand rejected as being unpatentable over Goff in view of U.S. Patent NO/ 4,910,395 ("Frankel"). We must again respectfully disagree, for at least the following reasons.

Dependent Claims 4, 6, 13 and 18: Claims 4, 6 and 13 depend from claim 1, and claim 18 depends from claim 15, both shown to be nonobvious in view of Goff. Adding Frankel does not remedy the failure of Goff to teach or suggest all of the elements of

claims 1 and 15. For example, Frankel also fails to discuss reducing a non-active gap. Frankel discloses an optical tracking system that splits incoming light with a beam splitter, to separately determine X and Y coordinates of the light. Frankel is not concerned with optical congruence, and certainly not with reducing a time delay between first and second sensor arrays. Like Goff, Frankel does not image an object, at all. Therefore, Frankel is also not concerned with, and accordingly does not teach or suggest, improving fidelity of an image captured with an optical sensor. Goff and Frankel, whether taken separately or in combination, do not teach or suggest all of the limitations of claims 1 and 15, and therefore do not establish *prima facie* obviousness. As noted above, if an independent claim is nonobvious, then so is any claim depending therefrom. Claims 4, 6 and 13 and claim 18 are allowable over Goff and Frankel, for at least this reason.

Furthermore, we disagree with the Examiner's contention that, regarding **claim 4**, it would have been obvious to use Frankel's beam splitter or triangular pyramid as a fiber optic faceplate in Goff. Goff already provides for splitting alkali emissions from a combustion flame; splitting incoming light with a beam splitter or pyramid might well disrupt this process, and would likely require substantial modification of Goff's existing arrangement. Furthermore, a faceplate, as in claim 4, is different from a beam splitter and a triangular pyramid. Compare, for example, FIGs. 3A-8 of the '237 Application with Frankel FIG. 1. Reconsideration is respectfully requested.

In addition, the elements of claims 6, 13 and 18 are not taught or suggested by Goff in view of Frankel, in the context of respective claims 1 and 15. Given at least the above arguments, we respectfully request withdrawal of the Examiner's rejection, and allowance of claims 4, 6, 13 and 18.

Dependent Claim 41: Claim 41 depends from claim 36, which is also nonobvious in light of Goff. And again, Frankel fails to teach or suggest the claim 36 elements that are missing in Goff. For example, claim 36 recites that optical congruence of first, second and third linear sensors are enhanced in relation to one another. Optical congruence is simply not mentioned or even suggested in Goff or Frankel. See

arguments in support of claim 1 and claims 4, 6, 13 and 18, above. Since Goff and Frankel can not and do not teach or suggest all of the elements of base claim 36, claim 41 is also nonobvious. Withdrawal of the Examiner's rejection, and allowance of claim 41, are requested for at least this reason.

Claim Rejections – 35 U.S.C. § 103 – Hegyi

Claims 42 and 43 stand rejected as being unpatentable over U.S. Patent No. 6,191,413 ("Hegyi"). We respectfully disagree.

Claim 42: Claim 42 recites an apparatus for effectively reducing a non-active gap of an optical sensor, including:

- (a) means for obtaining optical information from a field of view; and
- (b) means for orienting said optical information to at least two linear sensor elements of at least one optical sensor so as to enhance an optical congruence capability of said optical sensor.

Pursuant MPEP 2181(I), "a claim limitation will be interpreted to invoke 35 U.S.C. § 112, sixth paragraph, if it meets the following 3-prong analysis:

- (A) the claim limitations must use the phrase "means for" or "step for;"
- (B) the "means for" or "step for" must be modified by functional language; and
- (C) the phrase "means for" or "step for" must not be modified by sufficient structure, material or acts for achieving the specified function."

The limitations of claim 42 (A) use the phrase "means for", (B) modify the phrase "means for" by functional language, and (C) the phrase "means for" is not modified by sufficient structure, material or acts for achieving the specified function. The claim therefore meets the 3-prong analysis, and should be treated under 35 U.S.C. § 112, sixth paragraph.

The following is a quote from 35 U.S.C. 112, sixth paragraph:

"An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and *such claim shall be construed to cover the corresponding structure, material, or acts*

described in the specification and equivalents thereof." (emphasis added).

Furthermore,

"The plain and unambiguous meaning of paragraph six is that one construing means-plus-function language in a claim must look to the specification and interpret that language in light of the corresponding structure, material, or acts described therein, and equivalents thereof, to the extent that the specification provides such disclosure." *In re Donaldson*, 16 F.3d 1189, 29 U.S.P.Q.2D 1845 (Fed. Cir. 1994).

We respectfully submit that, contrary to the Examiner's note, Hegyi does not disclose an optical sensor that is functionally equivalent to Applicants' apparatus for effectively reducing a non-active gap of an optical sensor. For example, Applicant clearly recites "the use of optical fibers oriented to obtain visual images from a field of view at one location ***and distribute components of the optical images to more widely-spaced sensor elements of one or more optical sensors.***" Specification p. 3, lines 12-15. Applicant's optical fibers are described as oriented closer together at a first ends, proximate a field of view, and further apart at second ends, oriented toward a sensor element: "The ends of the optical fibers 130 that are coupled to the second fiber optic faceplate 120 are further separated from each other than the ends of the optical fiber 130 coupled to the first fiber optic faceplate 110." Specification p. 10, lines 1-3.

Hegyi does not disclose optical fibers. Rather, as the Examiner notes at page 11 of the pending Office Action, Hegyi discloses 'a generalized tube'. A generalized tube is not the same as an optical fiber. Furthermore, Hegyi does not disclose optical fibers or any other conduits with first ends, proximate a field of view, located closer together than second ends, oriented toward a sensor element. Rather, Hegyi depicts an opposite arrangement in FIGs. 5-7, where tube ends are farther apart proximate diffusers and closer together proximate photodetectors. See FIGs. 5-7; see also col. 5, line 53 – col. 6, line 20. Hegyi therefore does not disclose equivalents to (e.g., the particular spacing of) Applicant's means for obtaining and orienting optical information. Hegyi therefore cannot and does not teach or suggest all of the elements of claim 42, and *prima facie* obviousness is not established.

Dependent Claim 43: Claim 43 depends from claim 42, and thus benefits from like argument. Furthermore, claim 43 requires means for positioning the means for obtaining in relation to the optical sensor. We submit that the means for positioning of claim 43 also invokes 35 U.S.C. 112, sixth paragraph. We note that Hegyi does not teach or suggest equivalents to Applicant's means for positioning. For example, as noted above, Hegyi does not teach obtaining visual images from a field of view at one location and distributing components of the optical images to more widely-spaced sensor elements. Hegyi therefore also cannot teach means for positioning the "means for obtaining" to distribute components of optical images to more widely-spaced sensor elements in such relation to the optical sensor. For example, the '237 Application recites spacers that position the optical fibers as described above. Hegyi does not teach or suggest spacers as recited in the '237 Application.

Hegyi does not disclose equivalents to (e.g., optical fibers or the particular spacing of the optical fibers) Applicant's means for obtaining and orienting optical information. We therefore contend that claims 42 and 43 are allowable over Hegyi. Withdrawal of the Examiner's rejection, and allowance of claims 42 and 43, are respectfully requested.

CONCLUSION

Given the remarks and amendments presented herein, we submit that each rejection presented in the Office Action of December 4, 2006 is overcome. We respectfully request withdrawal of each of the Examiner's rejections and allowance of claims 1-43.

A Petition for Two Month's Extension of Time is filed herewith, along with authorization to charge the \$225 petition fee to deposit account no. 12-0600. No other fees are believed due. However, if any fee is deemed necessary in connection with this Amendment and Response, please charge the aforementioned deposit account.

If any issues remain outstanding, or if any questions arise regarding this paper, the Examiner is encouraged to telephone Applicant's attorney, Curtis A. Vock, at (720) 931-3011.

Respectfully submitted,

05 April 2007
Date

Heather F. Perrin
Heather F. Perrin, Reg. No. 52,884
Lathrop & Gage, L.C.
845 Pearl East Circle, Suite 300
Boulder, CO 80301
Telephone: (720) 931-3033
Facsimile: (720) 931-3001